

# NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

## FACT SHEET

(pursuant to NAC 445A.874)

Permittee Name: The Boeing Company, Santa Susana Field Laboratory  
Permit Number: Underground Injection Control (UIC) # UNEV95202  
Permit Action: Renewal  
Facility: Former Nevada Field Laboratory, Area D

### A. Description of Discharge

**Location:** Injection of treated groundwater is authorized into four infiltration/recharge trenches (E-1 through E-4) located at the former **Nevada Field Laboratory, Area D** at 2550 Whiskey Springs Road, approximately 20 miles northeast of Reno, Nevada, in Section 7, T.22N, R.22E, Washoe County.

**Characteristics:** All injectate is groundwater that has been treated to remove volatile organic contaminants (VOCs) trichloroethylene (TCE), 1,1,2-trichloro-1,2,2-trifluoroethane (Freon-113), and chlorotrifluoroethylene. Following treatment, the injectate meets primary drinking water standards.

### B. Synopsis

From 1962 to 1970, Rocketdyne, then a division of North American Aviation, operated a rocket engine testing facility known as the Nevada Field Laboratory (NFL). Rocketdyne, formerly a division of Rockwell International, is now a part of the Boeing Company. Three areas of the former NFL, "B", "C", and "D", were used for rocket engine testing. The subject of this UIC permit is Area D, located at the eastern end of Whiskey Springs Road. As part of the rocket testing program at this location, solvents were used to clean equipment, and have been found beneath a portion of the former test facility at Area D and the narrow valley along Whiskey Springs Road east of Right Hand Canyon Road. In the seventies, the property was sold and subdivided into individual residential parcels.

The current remediation system consists of eleven extraction wells (DEX-1 through DEX-7, DEX-9, DEX-10, and DEX-13 through DEX-17) where groundwater is pumped and transferred to a skid-mounted air stripping system. Groundwater is treated through the air stripping system at a rate of up to 80 gallons per minute, removing VOCs by forcing air from the bottom of the air stripper through water flowing down across aeration trays. The treated water is pumped to a liquid-phase granular activated carbon (GAC) vessel to remove any remaining VOCs, and then to three groundwater injection trenches (E-1 through E-3). Injection trench E-4 is not currently in use, but remains permitted for future use if necessary.

The site geology consists of an alluvium upper portion which overlies a stretch of volcanic bedrock. Groundwater exists in both formations. The contamination has penetrated the groundwater in the alluvium and has subsided into fractures of the bedrock. Extraction wells were constructed to penetrate both formations such that contaminated groundwater is extracted from both formations.

**C. Receiving Water Characteristics:**

The infiltration/recharge trenches are designed to allow injection by gravity flow. The receiving groundwater meets primary drinking water standards. Total Dissolved Solids concentrations range from 290-570 ppm. Depth to groundwater in the area of the injection/recharge trench system is approximately 30 feet. There are no public water supply wells within the project area. Private wells are sampled annually to demonstrate the absence of target constituents.

**D. Procedures for Public Comment**

Notice of the Division's intent to issue a permit authorizing the facility to discharge to groundwater of the State of Nevada is being sent to the Reno Gazette-Journal for publication no later than November 20, 2008.

Notice is also being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing for a period of 30 days following the date of the public notice. The comment period can be extended at the discretion of the Administrator. All written comments received during the comment period will be retained and considered in the final determination.

A public hearing on the proposed determination can be requested by the applicant, any affected state, any affected interstate agency, the regional administrator of EPA Region IX or any interested agency, person or group of persons.

Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determines to be appropriate. All public hearings will be conducted in accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445.605.

**E. Proposed Determination**

The Division has made the tentative determination to renew the injection permit for a period of five years.

**F. Proposed Effluent Limitations and Special Conditions**

See Part I.A and Attachment A of permit.

**G. Rationale for Permit Requirements**

Verification that the quality of water injected remains constant and does not adversely affect the existing hydrologic regime.

Prepared by: UIC Staff

Date: October 17, 2008

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